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# SEQUENCE LISTING

<110> BOREN, Thomas  
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 HAMMARSTROM, Lennart  
 NORMARK, Staffan  
 ILVER, Dag

<120> HELICOBACTER PYLORI ADHESIN BINDING GROUP ANTIGEN

<130> 0825-150P

<140> 09/202,178

<141> 1999-02-10

<150> PCT/SE97/01009

<151> 1997-06-10

<150> 9602287-6 SE

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35 40 45

Ile Gln Asp Leu Ser Asp Asn Tyr Glu Asn Leu Ser Lys Leu Leu Thr  
50 55 60

Arg Tyr Ser Thr Leu Asn Thr Leu Ile Lys Leu Ser Ala Asp Pro Ser  
65 70 75 80

Ala Ile Asn Ala Ala Arg Glu Asn Leu Gly Ala Ser Ala Lys Asn Leu  
85 90 95

Ile Gly Asp Thr Lys Asn Ser Pro Ala Tyr Gln Ala Val Leu Leu Ala  
100 105 110

Ile Asn Ala Ala Val Gly Phe Trp Asn Val Leu Gly Tyr Ala Thr Gln  
115 120 125

Cys Gly Gly Asn Ala Asn Gly Gln Glu Ser Thr Ser Ser Thr Thr Ile  
130 135 140

Phe Asn Asn Glu Pro Gly Tyr Arg Ser Thr Ser Ile Thr Cys Ser Leu  
145 150 155 160

Asn Arg Tyr Lys Pro Gly Tyr Tyr Gly Pro Met Ser Ile Glu Asn Phe  
165 170 175

Lys Lys Leu Asn Glu Ala Tyr Gln Ile Leu Gln Thr Ala Leu Asn Lys

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Ile Asp Gly Lys Thr Val Thr Thr Thr Ile Ser Ser Lys Val Val Asp		
245	250	255
Ser Gln Ala Lys Gly Asn Thr Thr Arg Val Ser Tyr Thr Glu Ile Thr		
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Asn Lys Leu Asp Gly Val Pro Asp Ser Ala Gln Ala Leu Leu Ala Gln		
275	280	285
Ala Ser Thr Leu Ile Asn Thr Ile Asn Thr Ala Cys Pro Tyr Phe Ser		
290	295	300
Val Thr Asn Lys Ser Gly Gly Pro Gln Met Glu Pro Thr Arg Gly Lys		
305	310	315 320
Leu Cys Gly Phe Thr Glu Glu Ile Ser Ala Ile Gln Lys Met Ile Thr		
325	330	335
Asp Ala Gln Glu Leu Val Asn Gln Thr Ser Val Ile Asn Glu His Glu		
340	345	350
Gln Ser Thr Pro Val Gly Gly Asn Asn Gly Lys Pro Phe Asn Pro Phe		
355	360	365
Thr Asp Ala Ser Phe Ala Gln Gly Met Leu Ala Asn Ala Ser Ala Gln		
370	375	380
Ala Lys Met Leu Asn Leu Ala His Gln Val Gly Gln Thr Ile Asn Pro		
385	390	395 400
Asp Asn Leu Thr Gly Thr Phe Lys Asn Phe Val Thr Gly Phe Leu Ala		
405	410	415
Thr Cys Asn Asn Lys Ser Thr Ala Gly Thr Ser Gly Thr Gln Gly Ser		
420	425	430
Pro Pro Gly Thr Val Thr Thr Gln Thr Phe Ala Ser Gly Cys Ala Tyr		

435	440	445
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450	455	460
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Gln Glu Leu Gly Arg Asn Pro Phe Arg Lys Val Gly Ile Val Ser Ser		
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Ala Ser Asp Val Trp Thr Tyr Gly Phe Gly Ala Asp Ala Leu Tyr Asn		
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Phe Ile Asn Asp Lys Ala Thr Asn Phe Leu Gly Lys Asn Asn Lys Leu		
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Ser Val Gly Leu Phe Gly Gly Ile Ala Leu Ala Gly Thr Ser Trp Leu		
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Lys Met Asn Val Ala Asn Phe Gln Phe Leu Phe Asn Met Gly Val Arg		
675	680	685
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 <212> PRT  
 <213> Helicobacter pylori

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 <222> (46)..(59)  
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 Glu Ala Ala Gln Met Val Thr Asn Thr Lys Gly Ile Gln Gln Leu Ser  
                                     35                                      40                                      45  
 Asp Asn Tyr Glu Lys Leu Asn Asn Leu Leu Asn Asn Tyr Ser Thr Leu  
                                     50                                      55                                      60  
 Asn Thr Leu Ile Lys Leu Ser Ala Asp Pro Ser Ala Ile Asn Asp Ala  
   65                                      70                                      75                                      80  
 Arg Asp Asn Leu Gly Ser Ser Ala Lys Asn Leu Leu Asp Val Lys Thr  
                                     85                                      90                                      95  
 Asn Ser Pro Ala Tyr Gln Ala Val Leu Leu Ala Leu Asn Ala Ala Val  
                                     100                                      105                                      110  
 Gly Leu Trp Gln Val Thr Ser Tyr Ala Phe Thr Ala Cys Gly Pro Gly  
                                     115                                      120                                      125



Ser Asn Glu Ser Ala Asn Gly Gly Ile Gln Thr Phe Asn Asn Val Pro  
 130 135 140

Gly Gln Lys Thr Thr Thr Ile Thr Cys Asn Ser Tyr Tyr Gln Pro Gly  
 145 150 155 160

His Gly Gly Pro Ile Ser Thr Ala Asn Tyr Ala Lys Ile Asn Gln Ala  
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Tyr Gln Ile Ile Gln Lys Ala Leu Thr Ala Asn Glu Ala Asn Gly Asp  
 180 185 190

Gly Val Pro Val Leu Ser Asp Thr Thr Thr Lys Leu Asp Phe Thr Ile  
 195 200 205

Gln Gly Asp Lys Arg Thr Gly Gly Arg Pro Asn Thr Pro Lys Lys Phe  
 210 215 220

Pro Trp Ser Asp Gly Lys Tyr Ile His Thr Gln Trp Ile Asp Thr Thr  
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Pro Gln Ser Thr Glu Thr Lys Ile Asn Thr Glu Asn Asn Ala Gln Glu  
 245 250 255

Leu Leu Lys Gln Ala Ser Ile Ile Ile Thr Thr Leu Asn Glu Ala Cys  
 260 265 270

Pro Asn Phe Gln Asn Gly Gly Ser Gly Tyr Trp Gln Gly Ile Ser Gly  
 275 280 285

Asn Gly Thr Met Cys Gly Met Phe Lys Asn Glu Ile Ser Ala Ile Gln  
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Gly Met Ile Ala Asn Ala Gln Glu Ala Val Ala Gln Ser Lys Ile Val  
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Ser Glu Asn Ala Gln Asn Gln Asn Asn Leu Asp Thr Gly Lys Pro Phe  
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Asn Pro Phe Thr Asp Ala Ser Phe Ala Gln Ser Met Leu Lys Asn Ala  
 340 345 350

Gln Ala Gln Ala Glu Ile Leu Asn Gln Ala Glu Gln Val Val Lys Asn  
 355 360 365

Phe Glu Lys Ile Pro Lys Asn Phe Val Ser Asp Ser Leu Gly Val Cys  
 370 375 380

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Ile	Gln	Gln	Ala	Glu	Asn	Ile	Ala	Asp	Thr	Leu	Val	Asn	Phe	Lys	Ser	435	440	445	
Arg	Tyr	Ser	Glu	Leu	Gly	Asn	Thr	Tyr	Asn	Ser	Ile	Thr	Thr	Ala	Leu	450	455	460	
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Ala	Thr	Asn	Phe	Leu	Gly	Lys	Asn	Asn	Lys	Leu	Ser	Val	Gly	Leu	Phe	595	600	605	
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